

Appl. No. : 09/727,424
Filed : December 1, 2000

AMENDMENTS TO THE DRAWINGS

As stated below, Applicant has requested to amend Figures 1e, 4, 5, 6, 8, 10, and 14 to correct clerical errors, as shown in the attached copies of the figures labeled "Annotated Sheet Showing Changes" wherein the corrections are indicated with red ink.

REQUEST FOR APPROVAL OF DRAWING CHANGES

The amendment requested herein is to correct clerical errors of Figures 1e, 4, 5, 6, 8, 10, and 14 as shown with red ink in the attached copies of the figures labeled "Annotated Sheet Showing Changes". That is, Figure 1e has been amended to indicate an arrowhead which was missing. Figures 4, 5, and 6 have been amended to match the numerals and the words indicating the same structures. Figures 8, 10, and 14 have been amended to clarify a selection at step I (page 16, lines 3-5 of the specification, for example). No new matter has been added. Replacement Sheets are enclosed herein. Approval of this amendment is respectfully requested.



Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424 Atty Docket: YAMAH5.970A

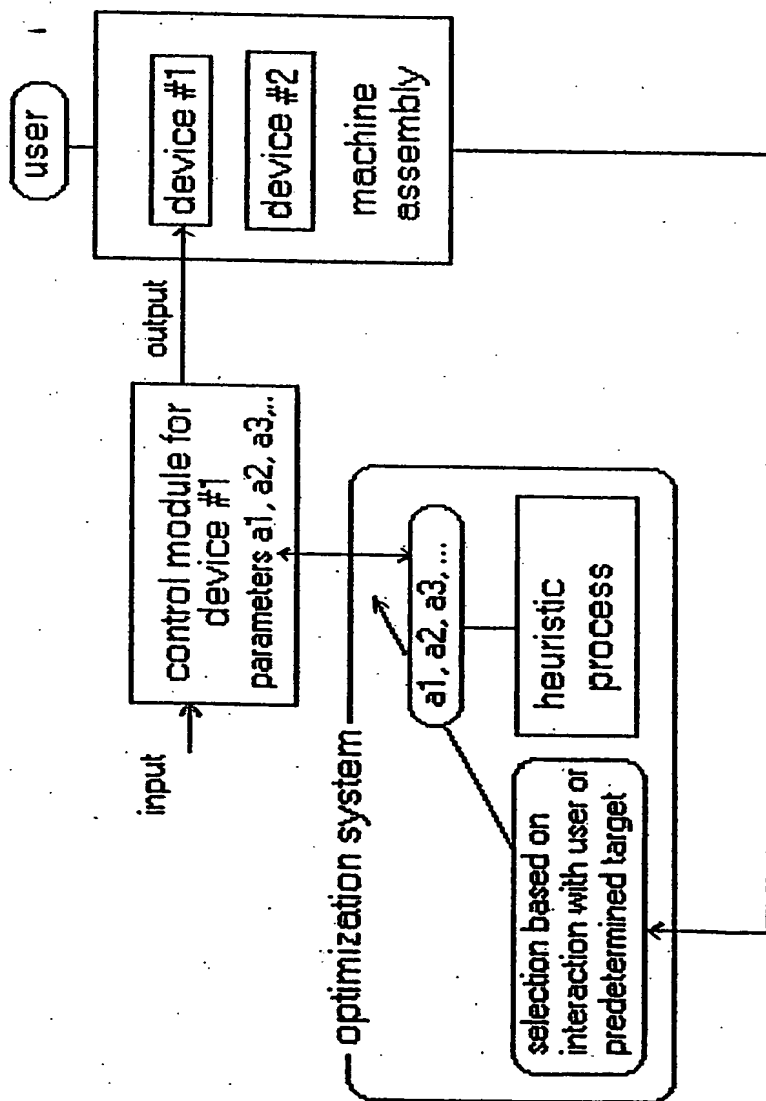


Fig. 1a



Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424

Atty Docket: YAMAH5.970A

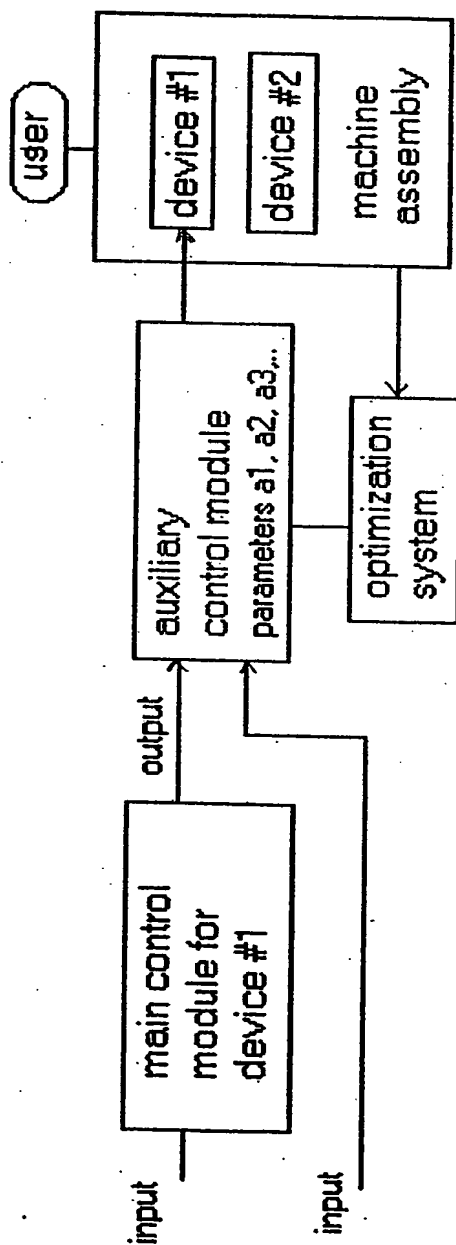


Fig. 1b



Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424

Atty Docket: YAMAH5.970A

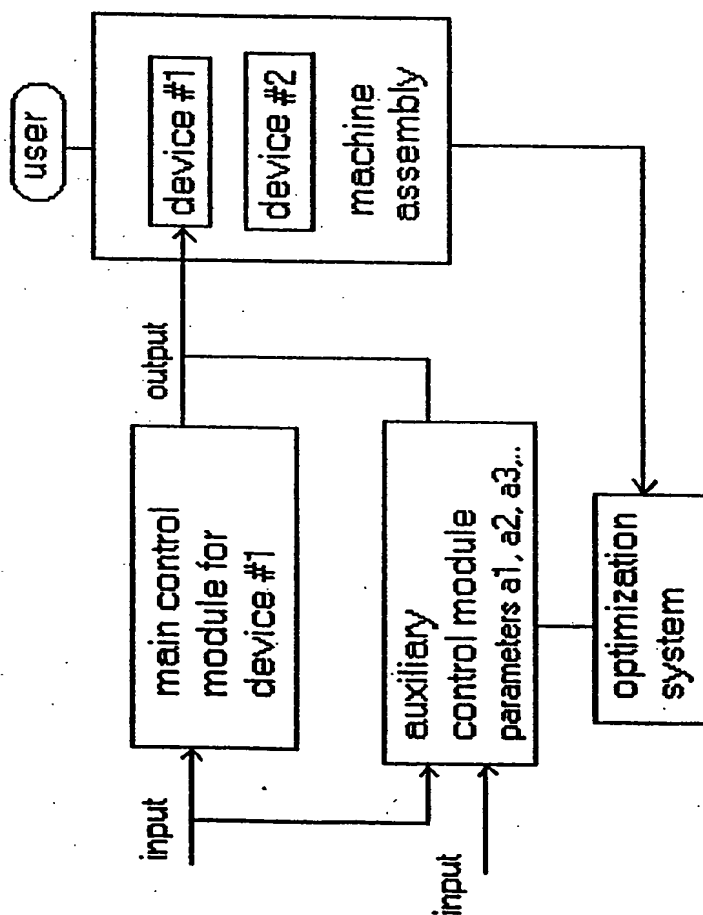


Fig. 1c



Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424

Atty Docket: YAMAH5.970A

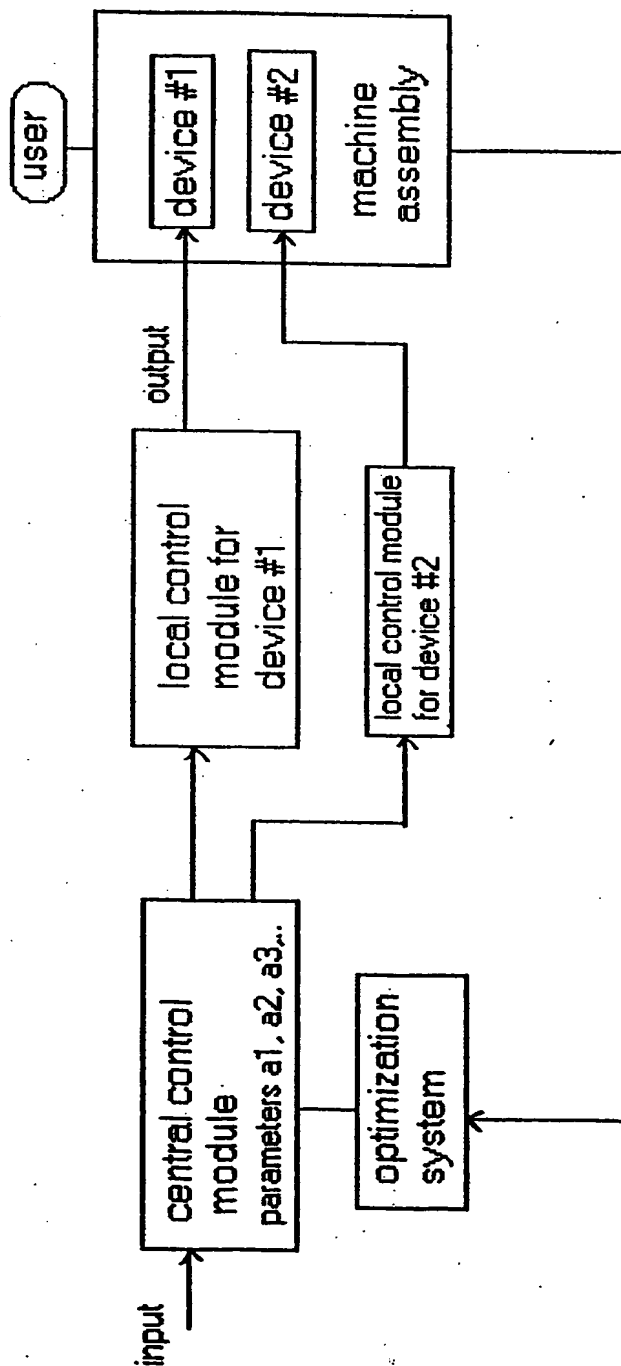


Fig. 1d



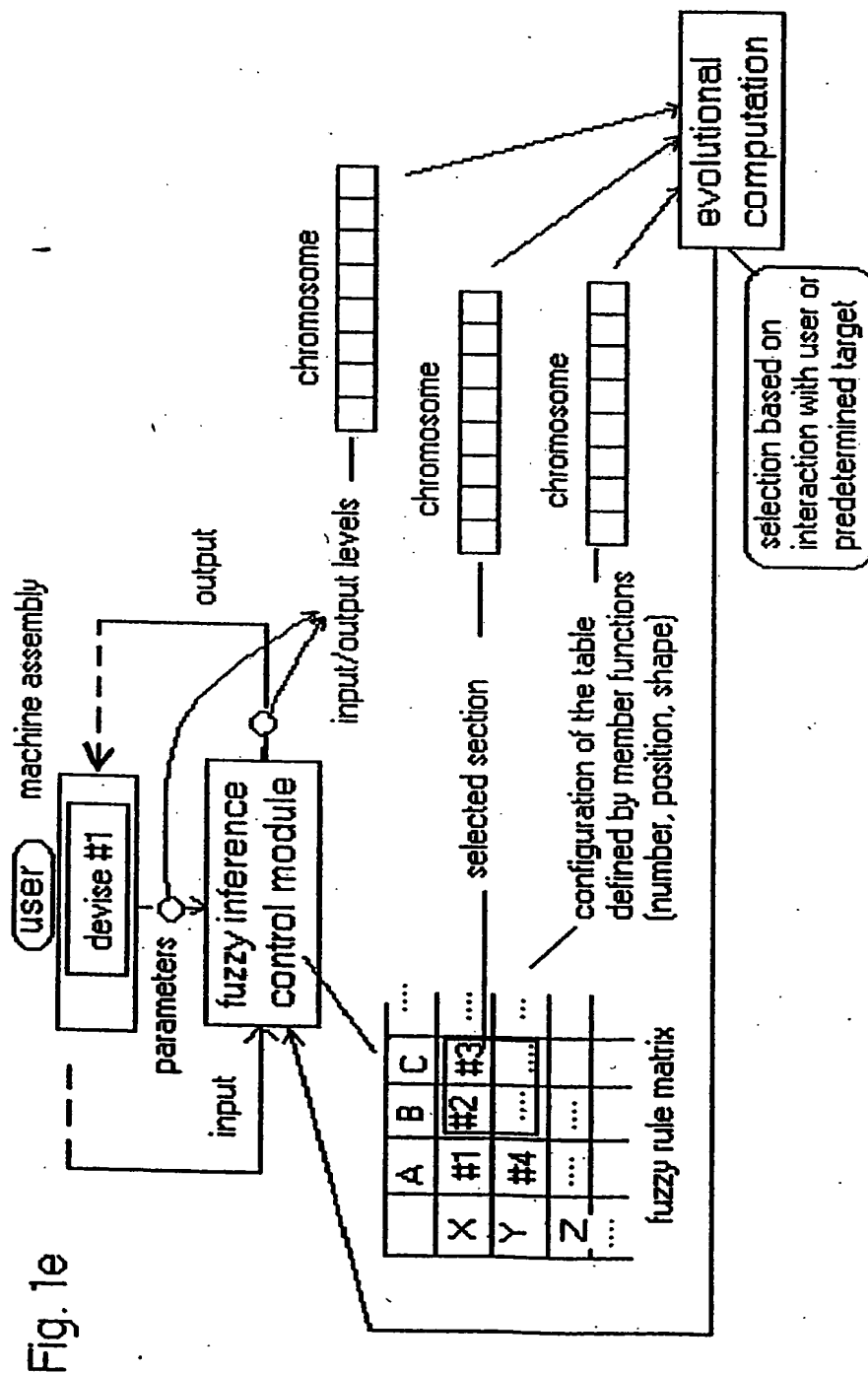
Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424

Atty Docket: YAMAHS.970A





Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424 Atty Docket: YAMAH5.970A

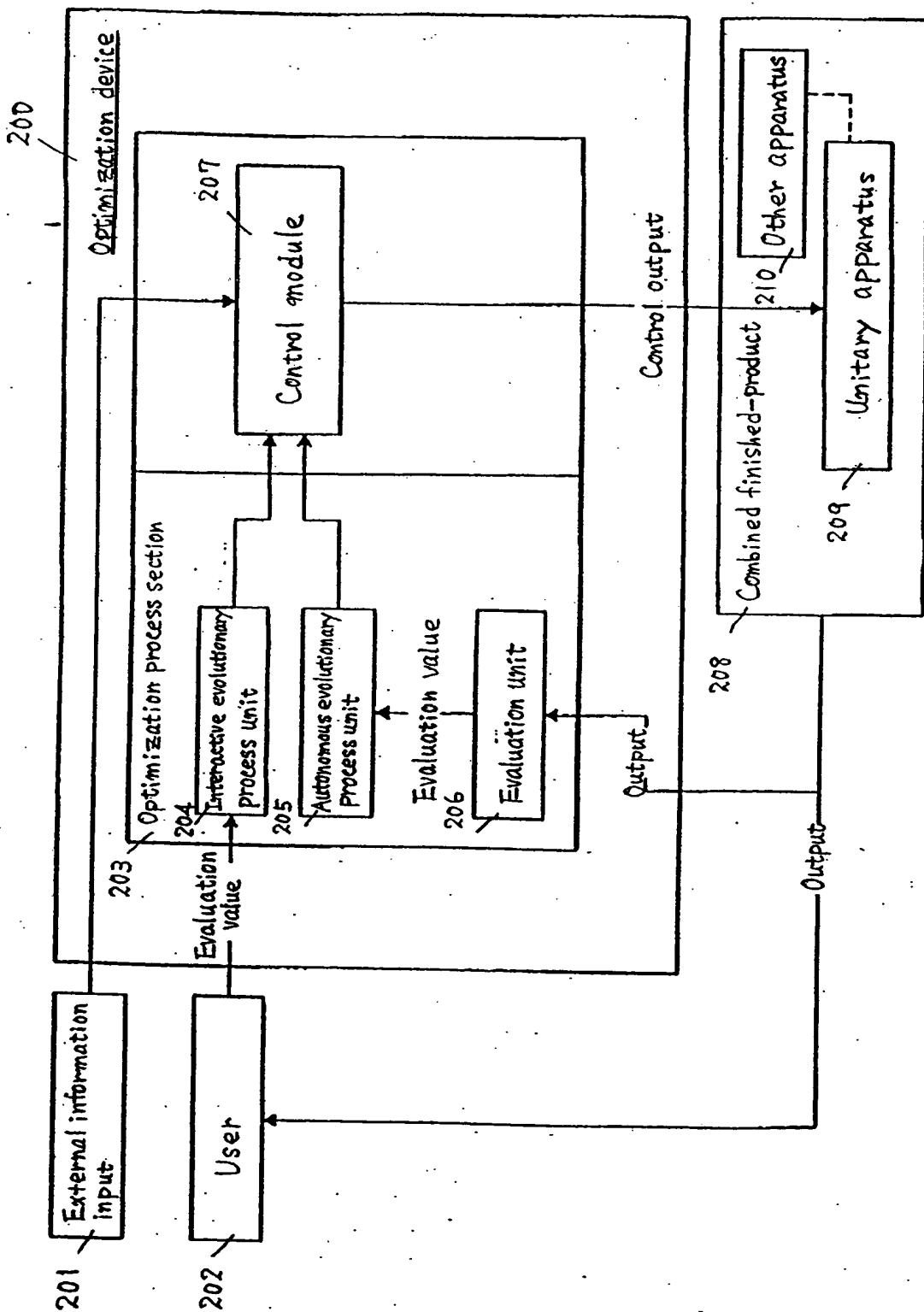


FIG. 2



Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424 Atty Docket: YAMAH5.970A

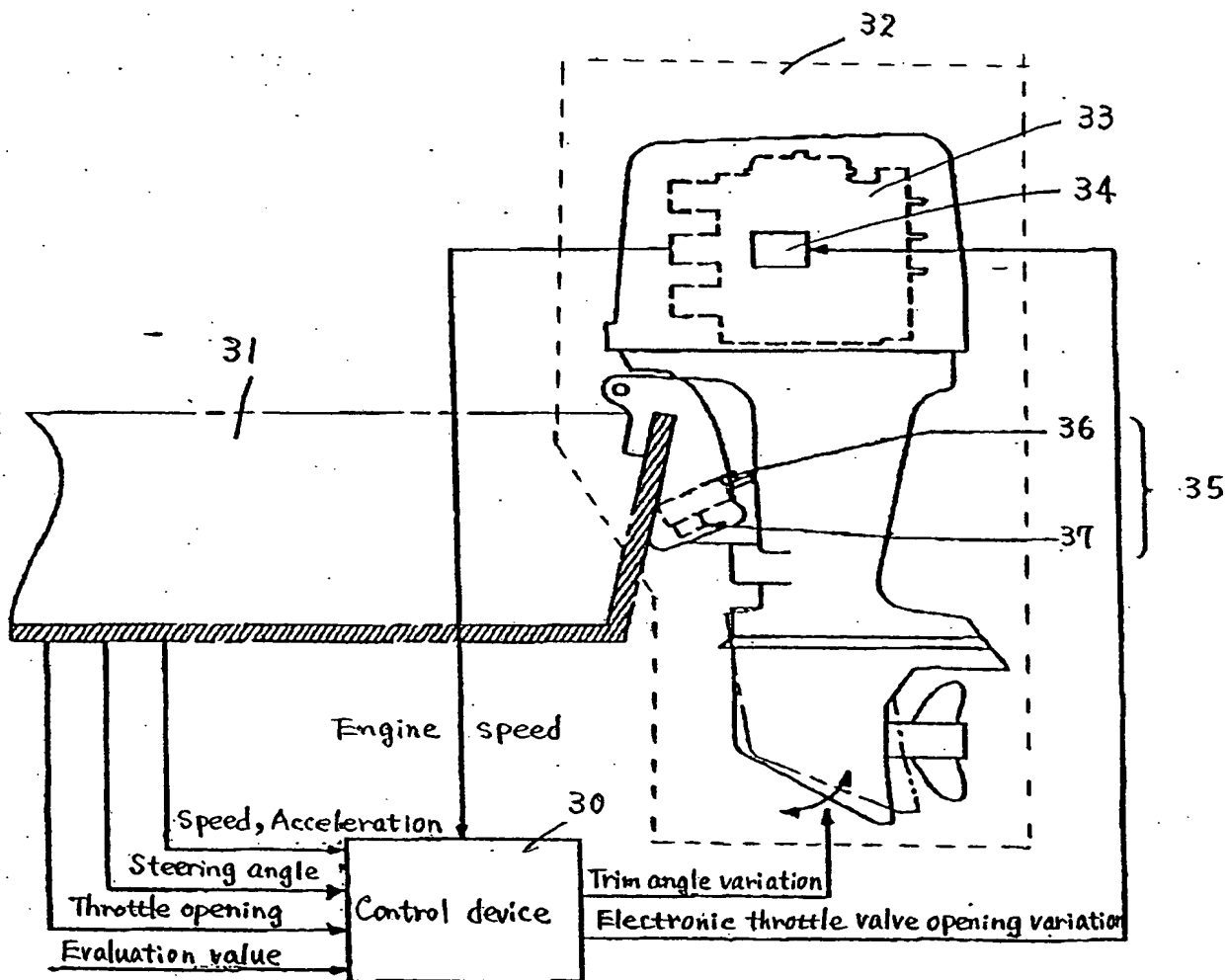


FIG. 3



Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY
KAJI, et al.
Appl. No.: 09/727,424 Atty Docket: YAMAHS.970A

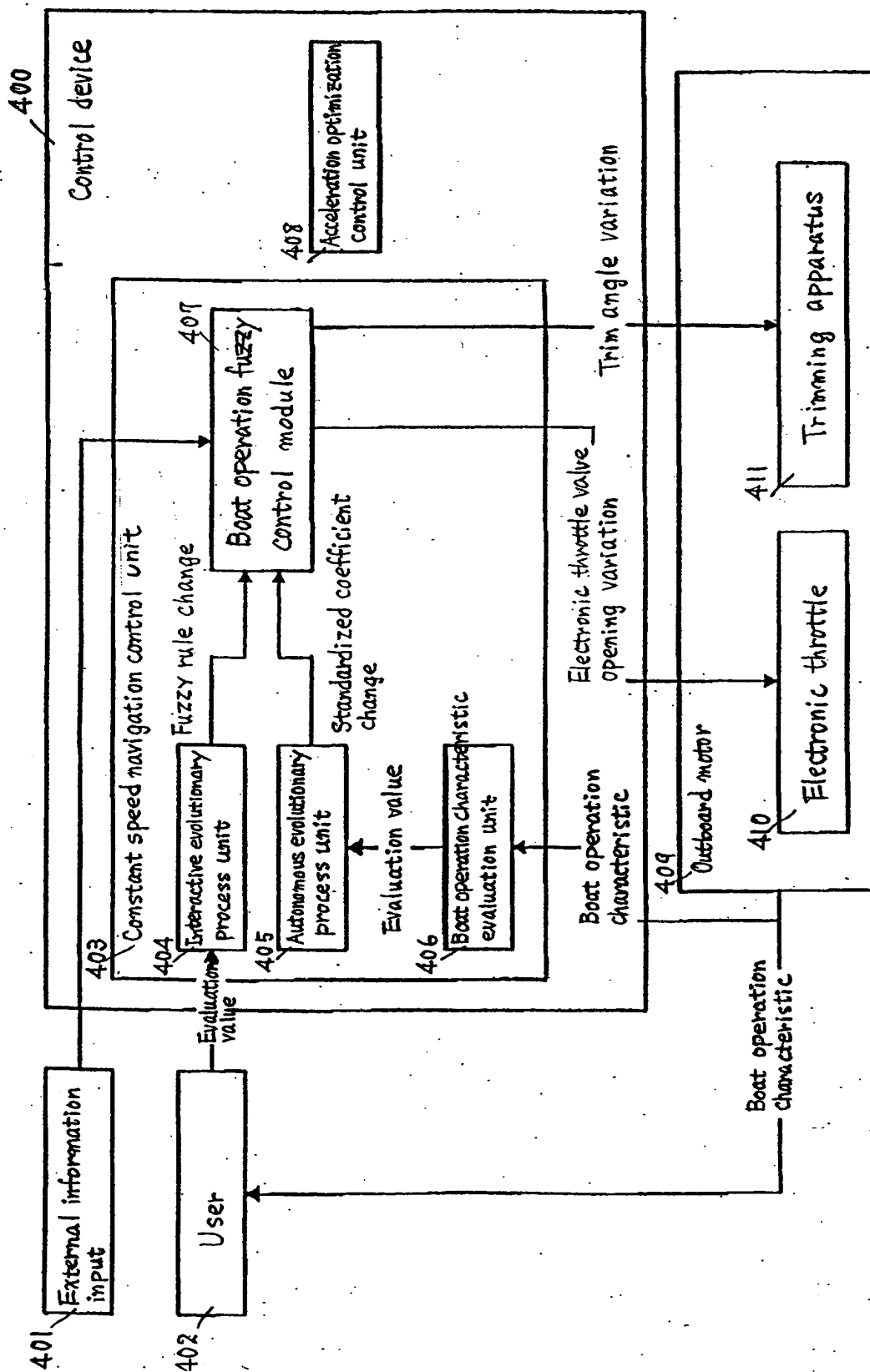


FIG. 4



Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

* Appl. No.: 09/727,424 Atty Docket: YAMAH5.970A

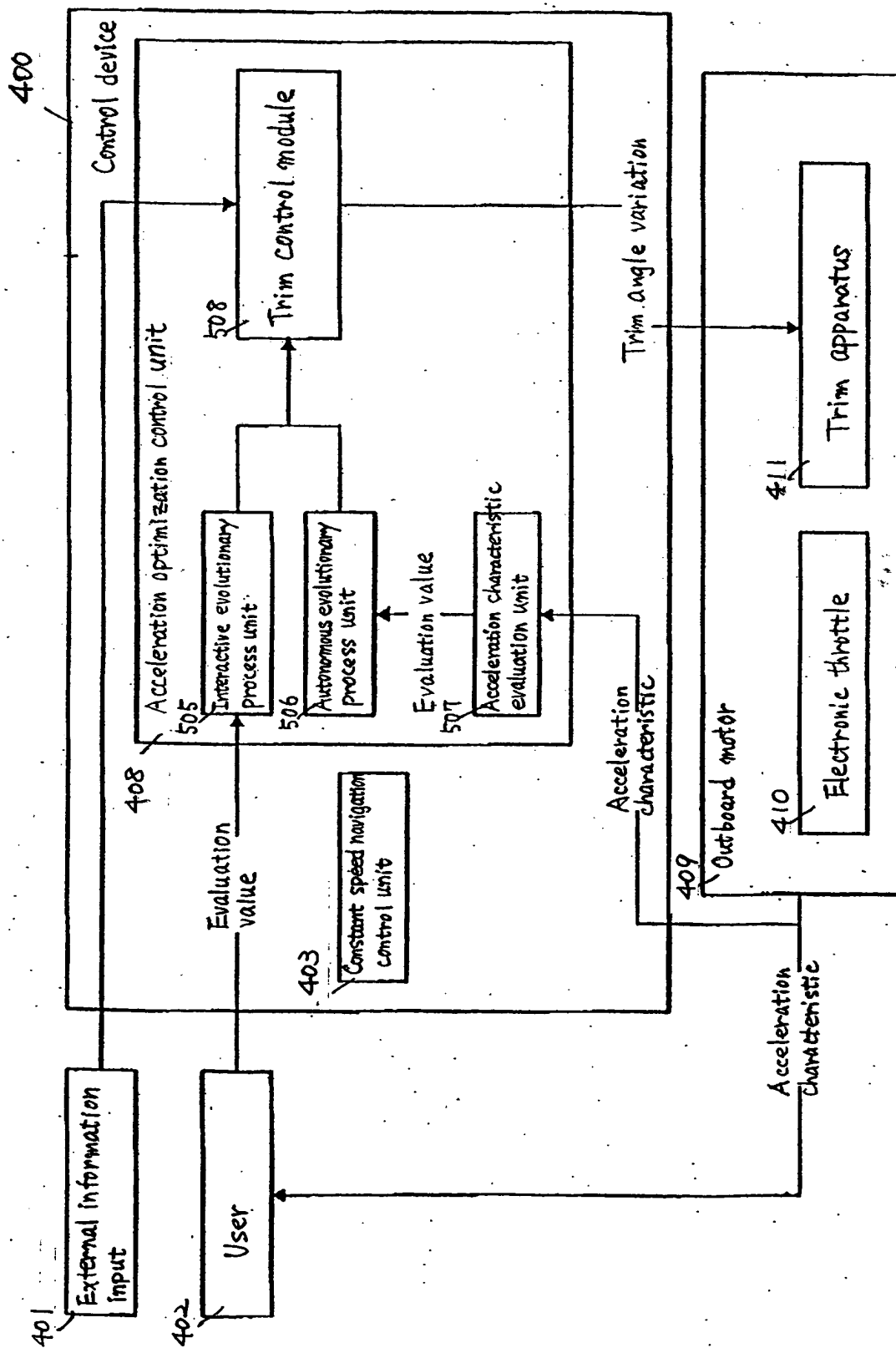


FIG. 5

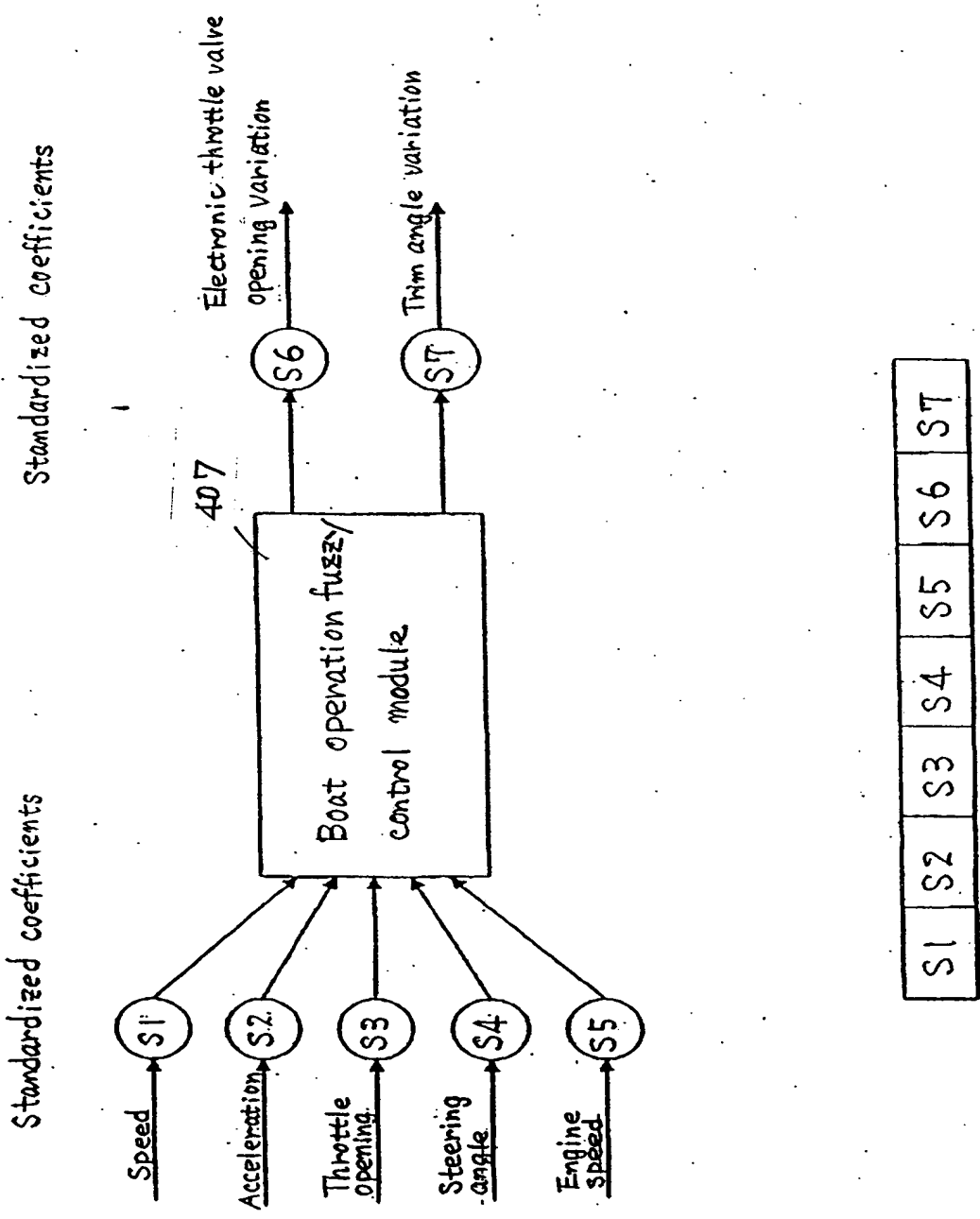
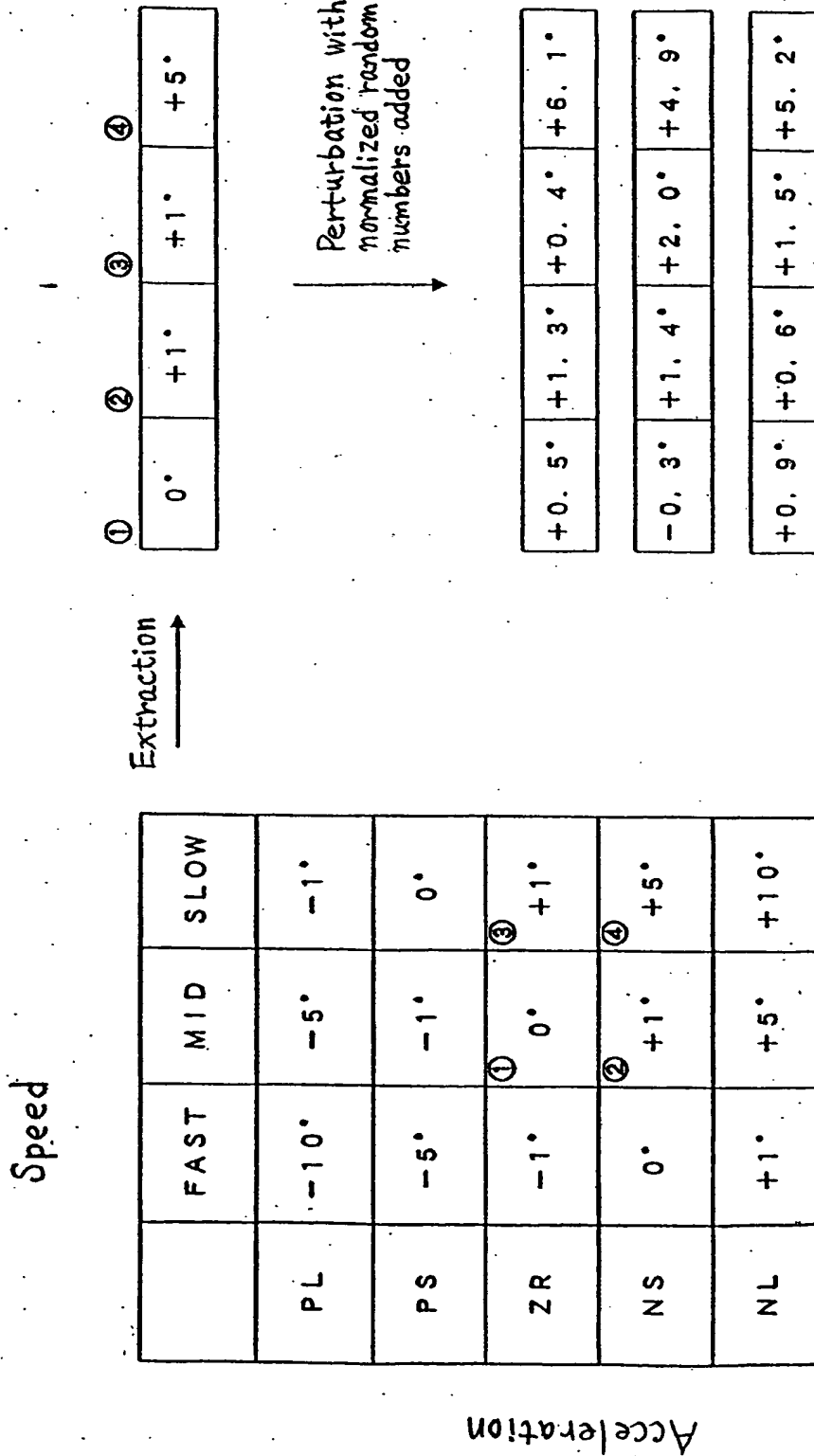


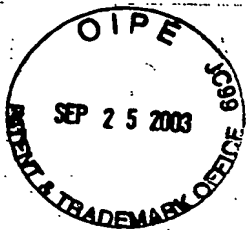
FIG. 6



• • •

Fuzzy rule table
 input: Speed, Acceleration
 output: Electronic throttle valve opening variable

FIG. 7



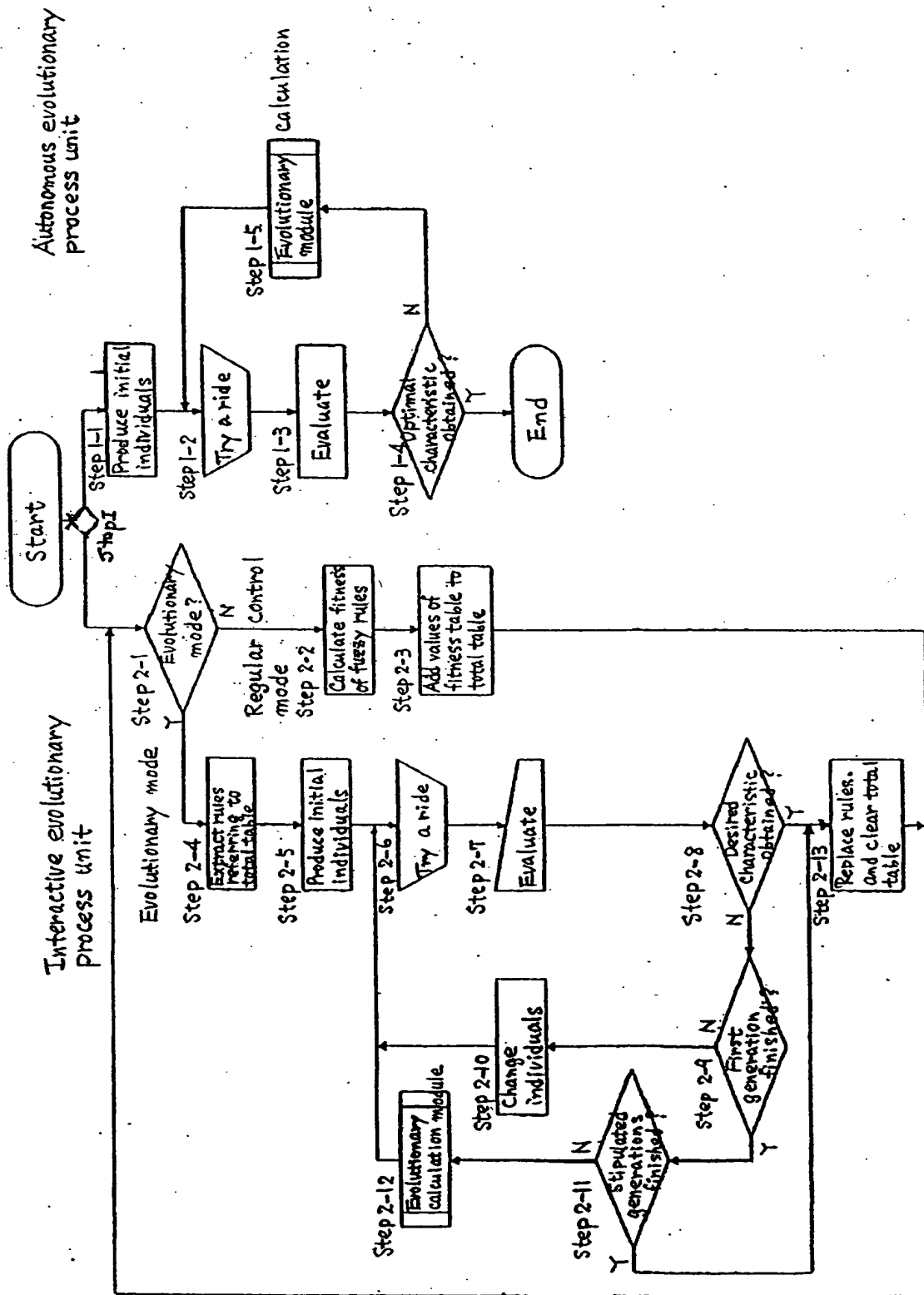
Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424

Atty Docket: YAMAH5.970A



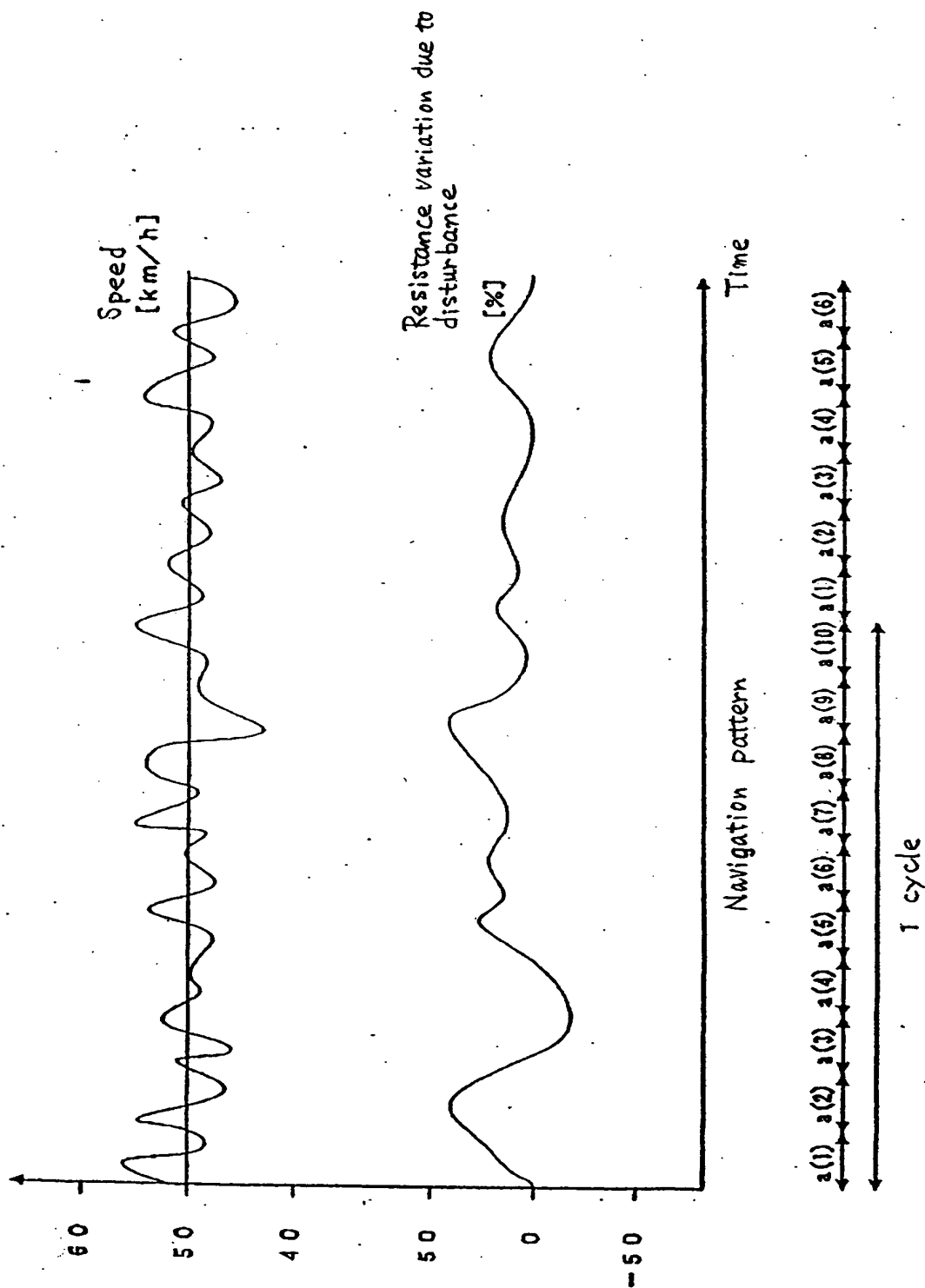


FIG. 9



Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424

Atty Docket: YAMAH5.970A

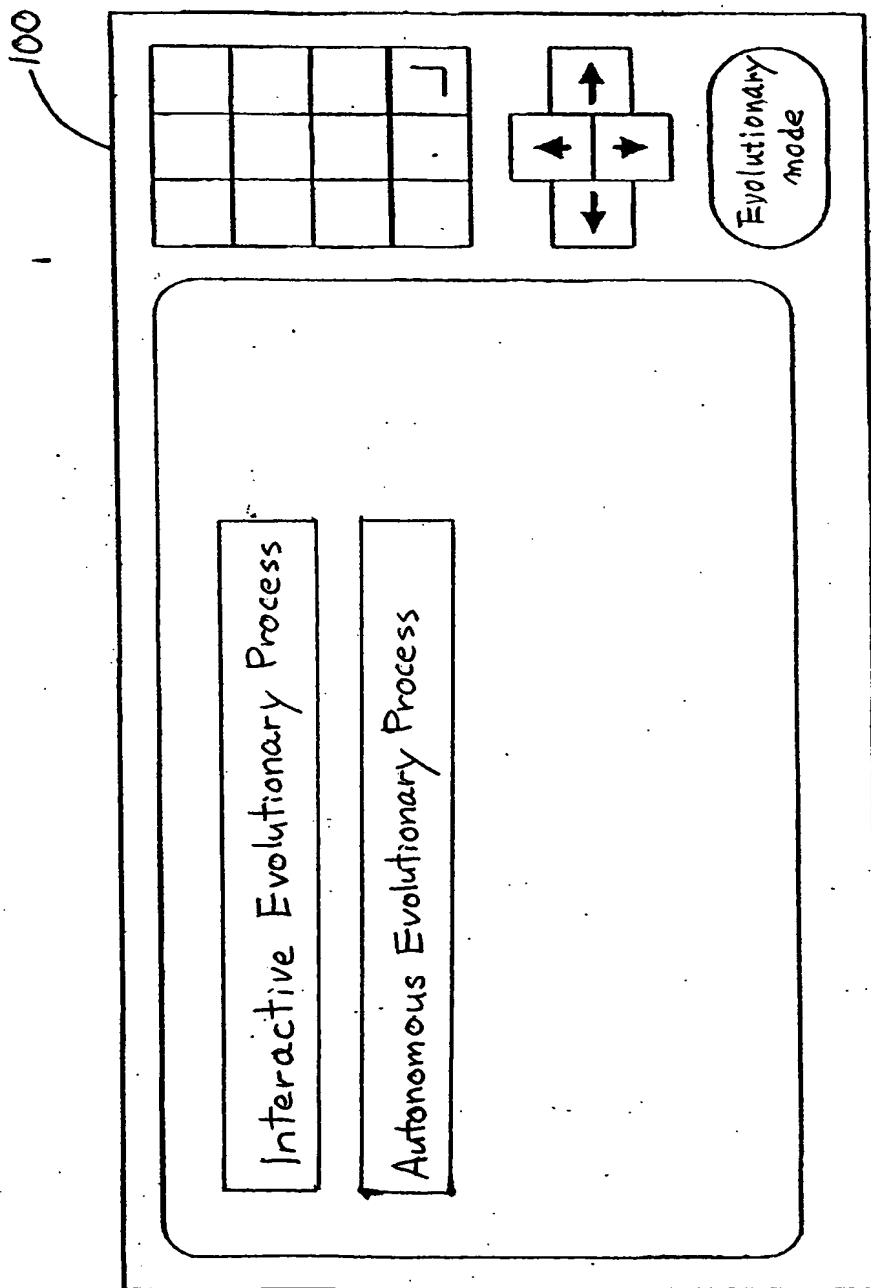


FIG. 10



Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424

Atty Docket: YAMAH5,970A

Speed		Speed	
Acceleration	Add	FAST	SLOW
		MID	SLOW
PL		0.02	0.27
PS		4.96	3.72
ZR		12.61	35.48
NS		9.55	22.37
NL		8.96	2.44

Total table

FIG. 11



Displacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424 Atty Docket: YAMAH5.970A

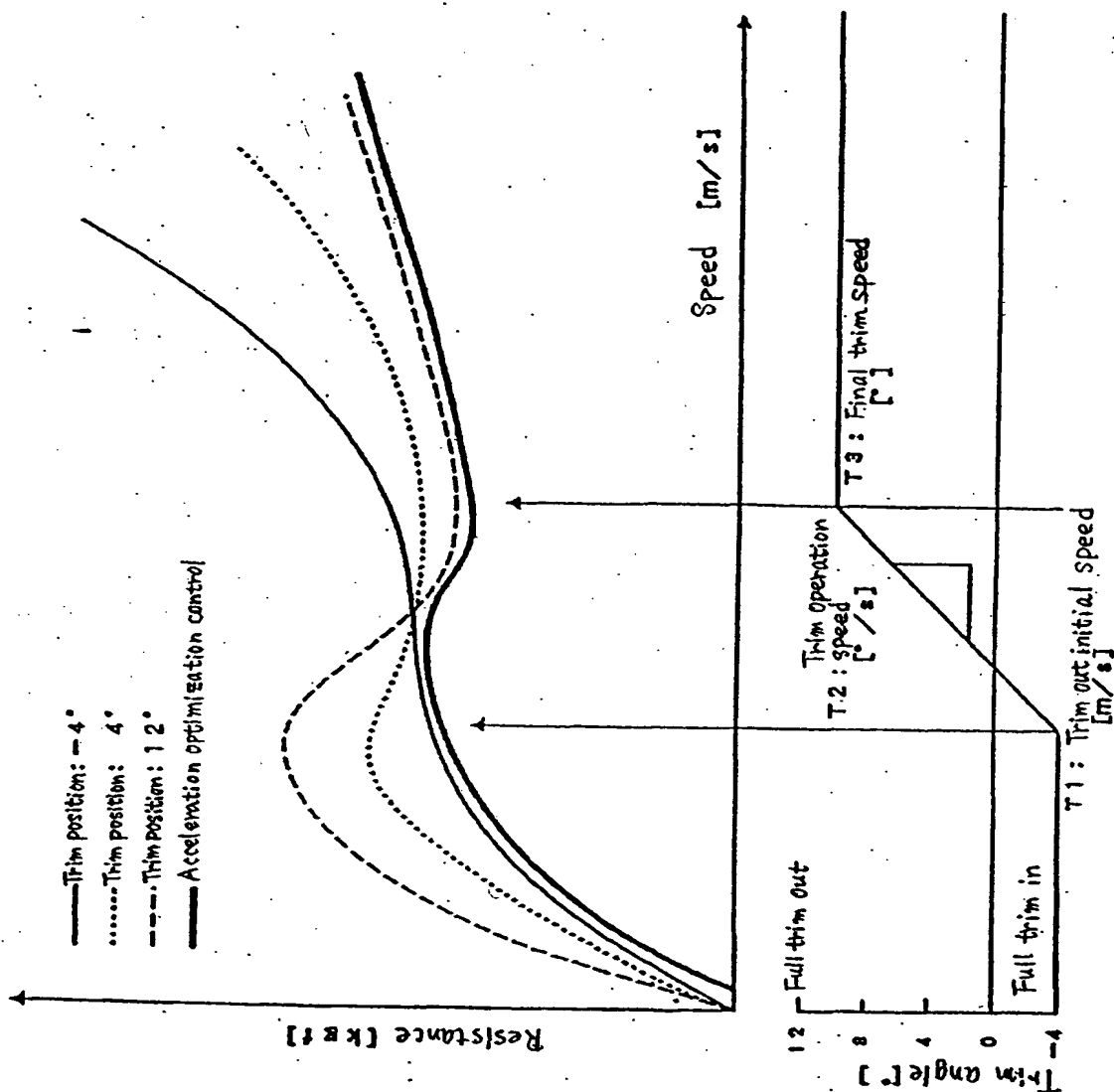


FIG. 12

T1	T2	T3
----	----	----

FIG. 13



Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424

Atty Docket: YAMAH5.970A

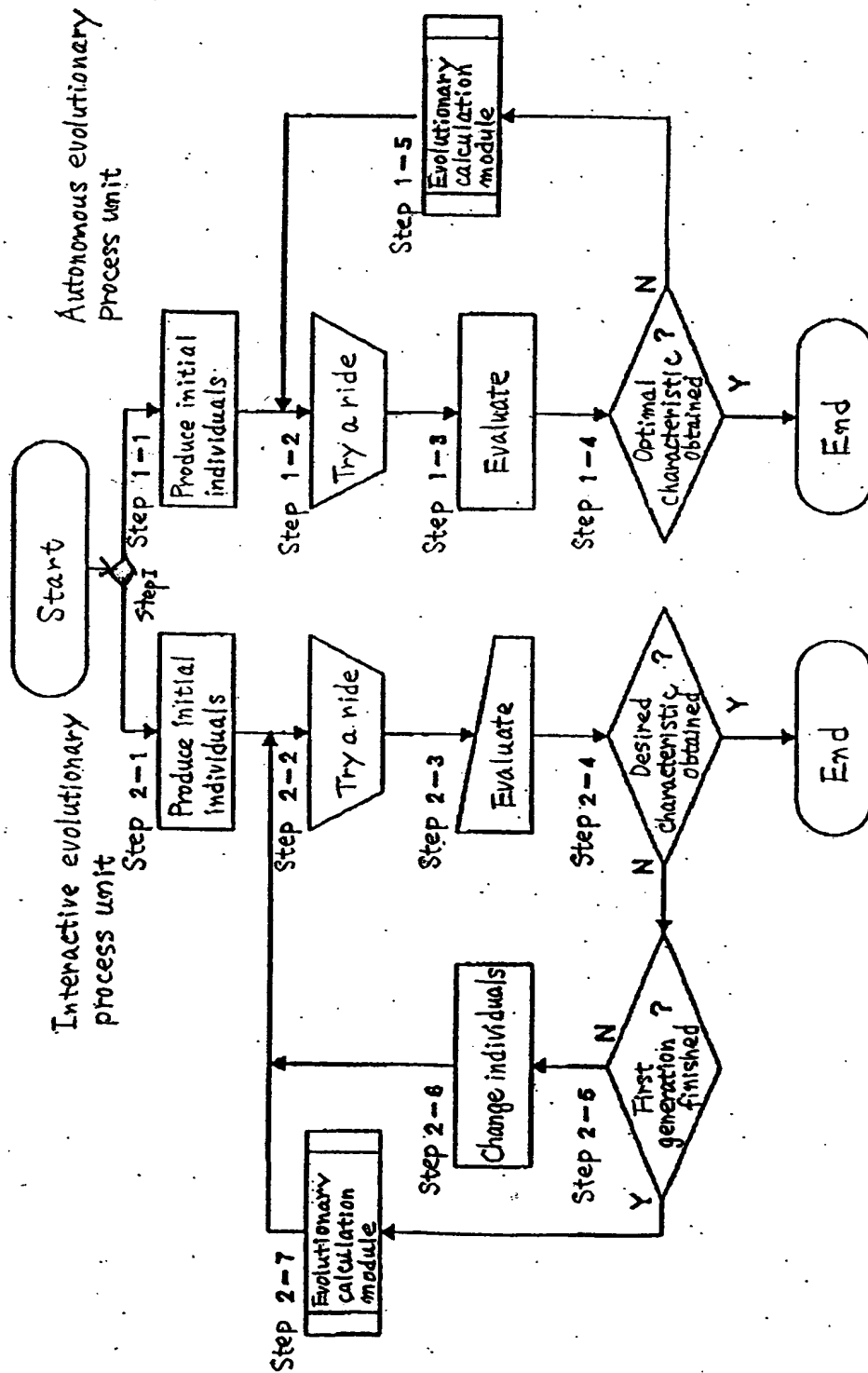


FIG. 14



Evolutionary computation module (GA)

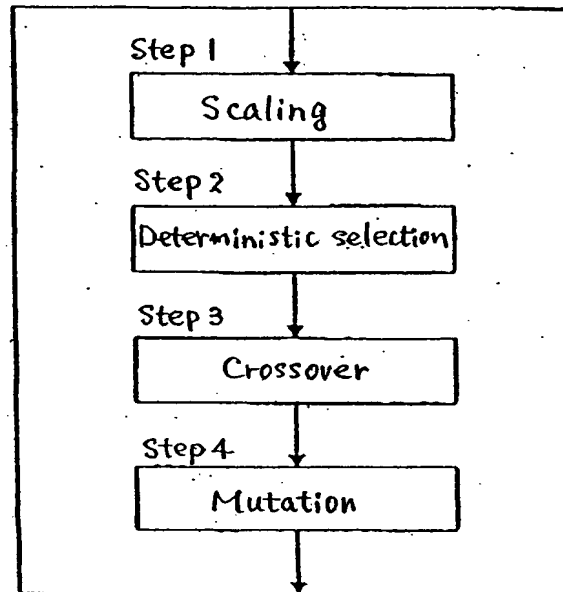


FIG. 15

Evolutionary computation module (ES)

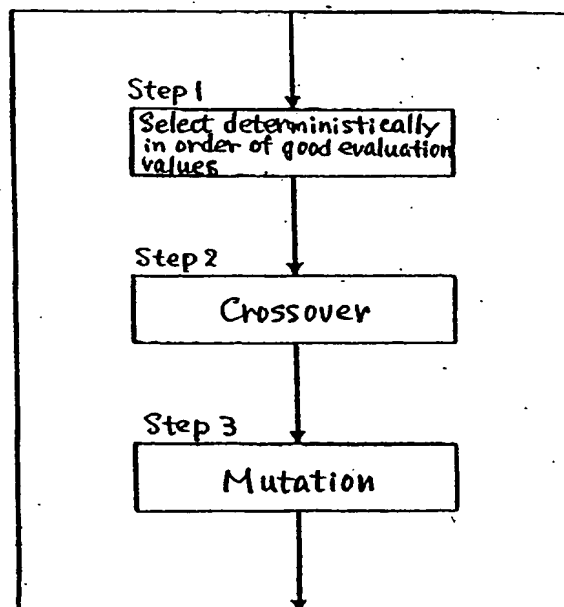


FIG. 16

Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424 Atty Docket: YAMAH5.970A



Evolutionary Computation module (EP)

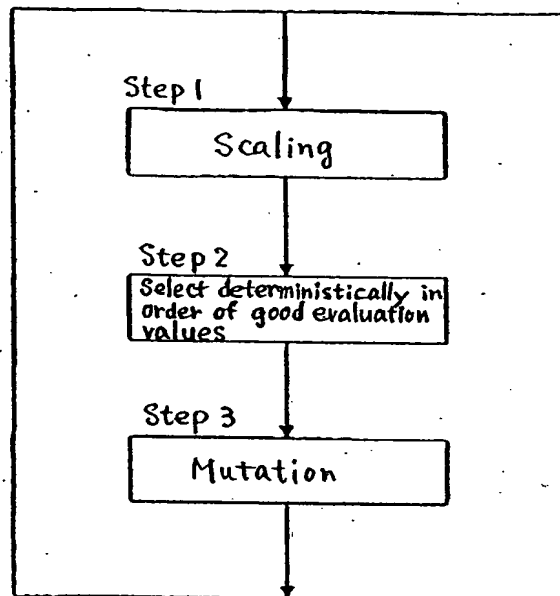


FIG. 17

Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424 Atty Docket: YAMAHS.970A

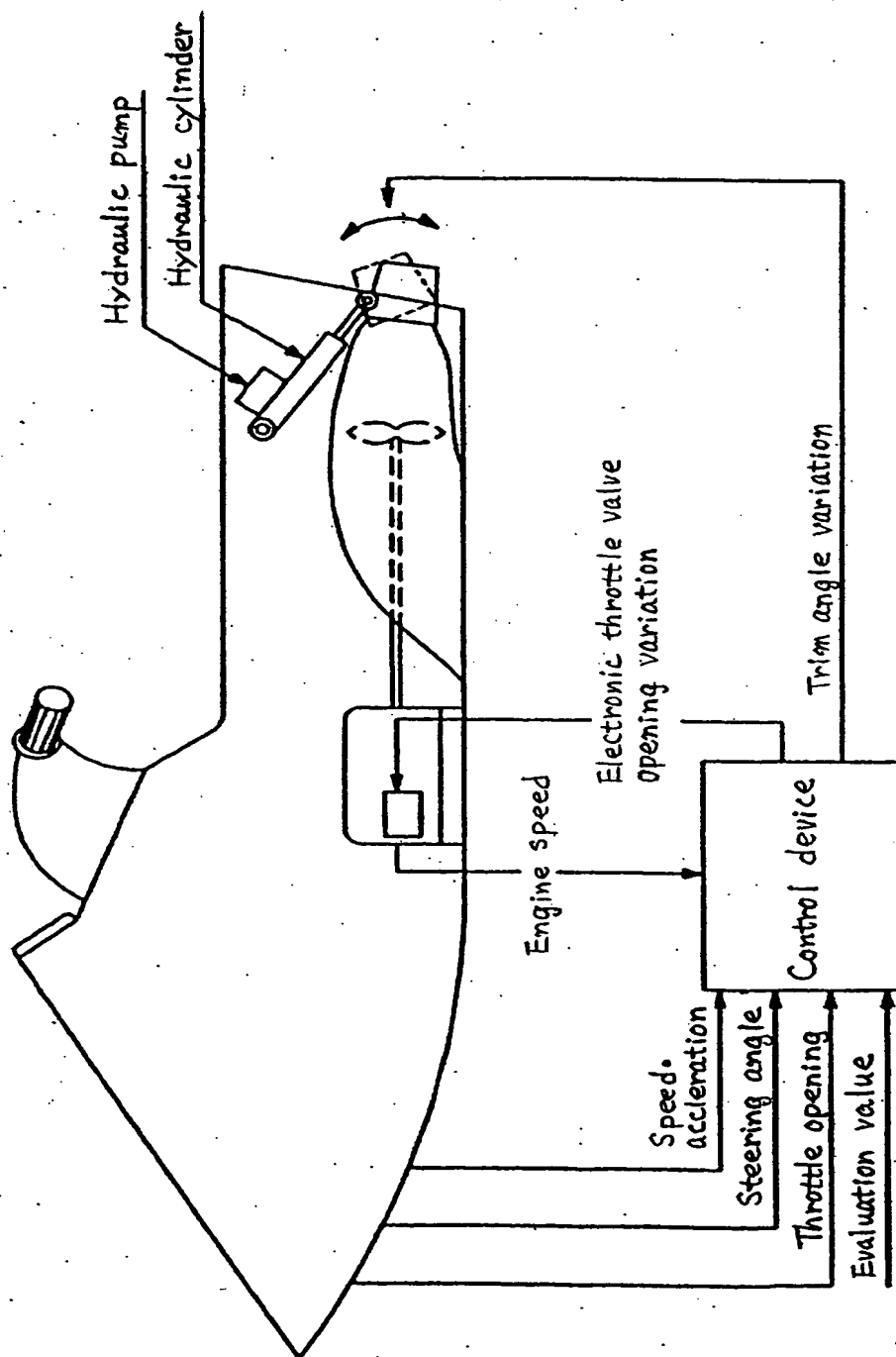


FIG. 18

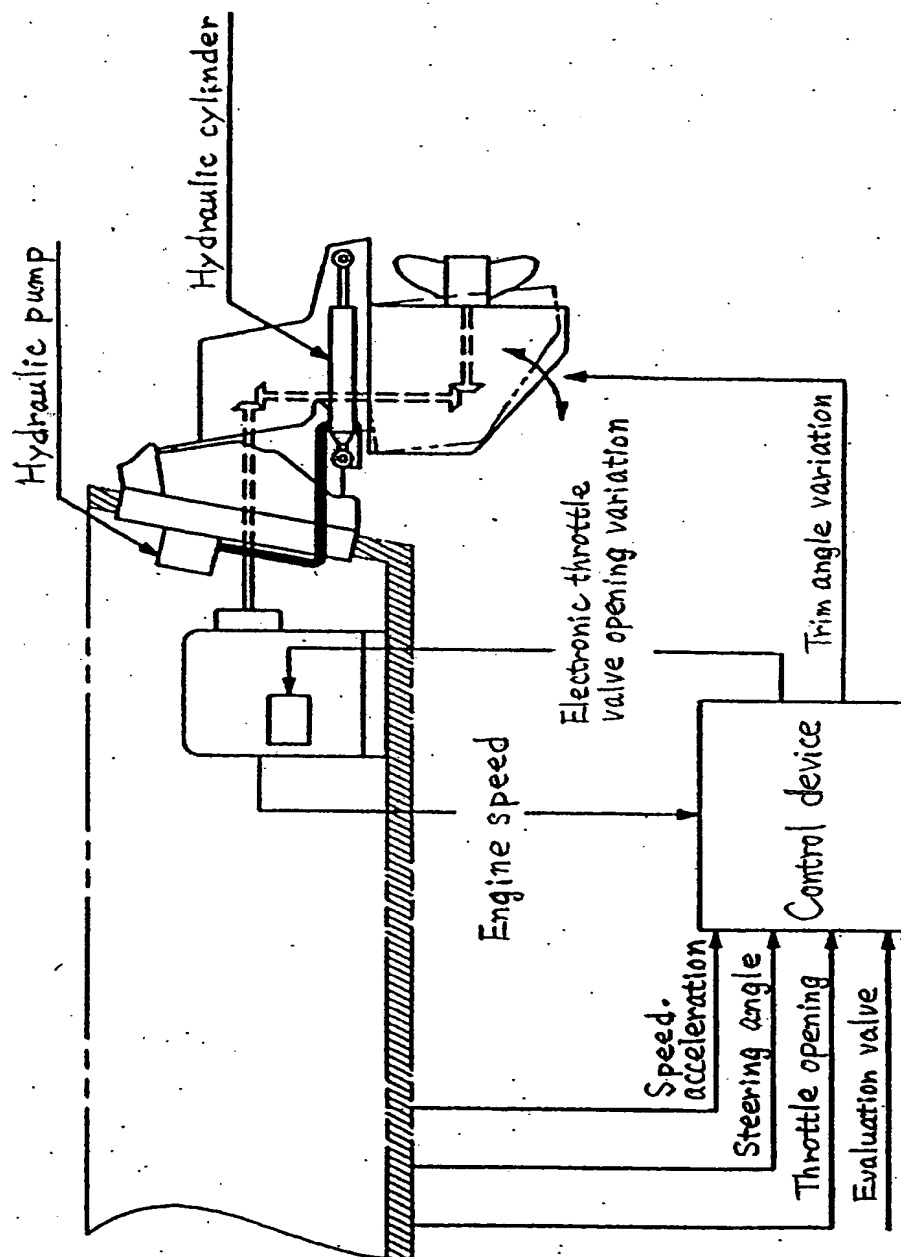
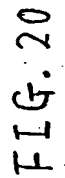


FIG. 19



Replacement Sheet

APPARATUS FOR OPTIMIZING CONTROL SYSTEM OF UNIT
DEVICE INTEGRATED IN MACHINE ASSEMBLY

KAJI, et al.

Appl. No.: 09/727,424

Atty Docket: YAMAH5.970A

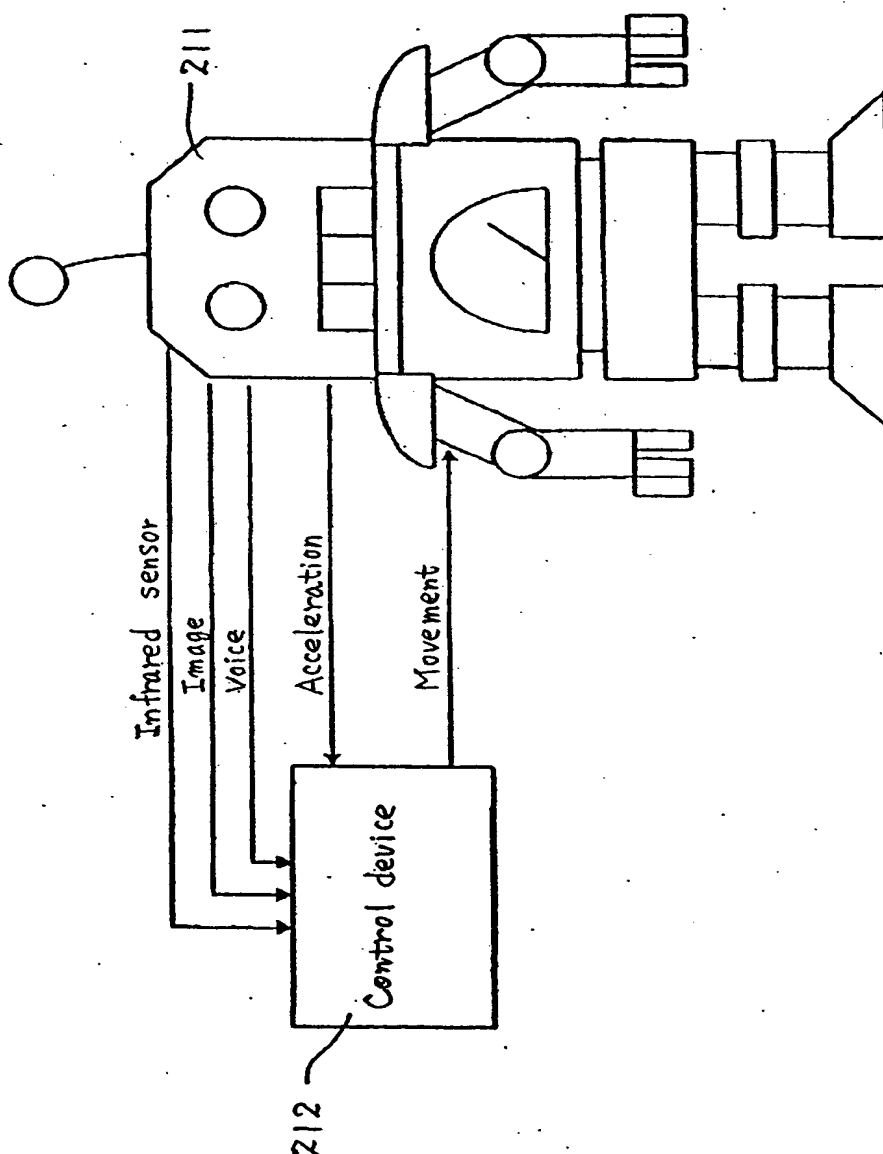


FIG. 21



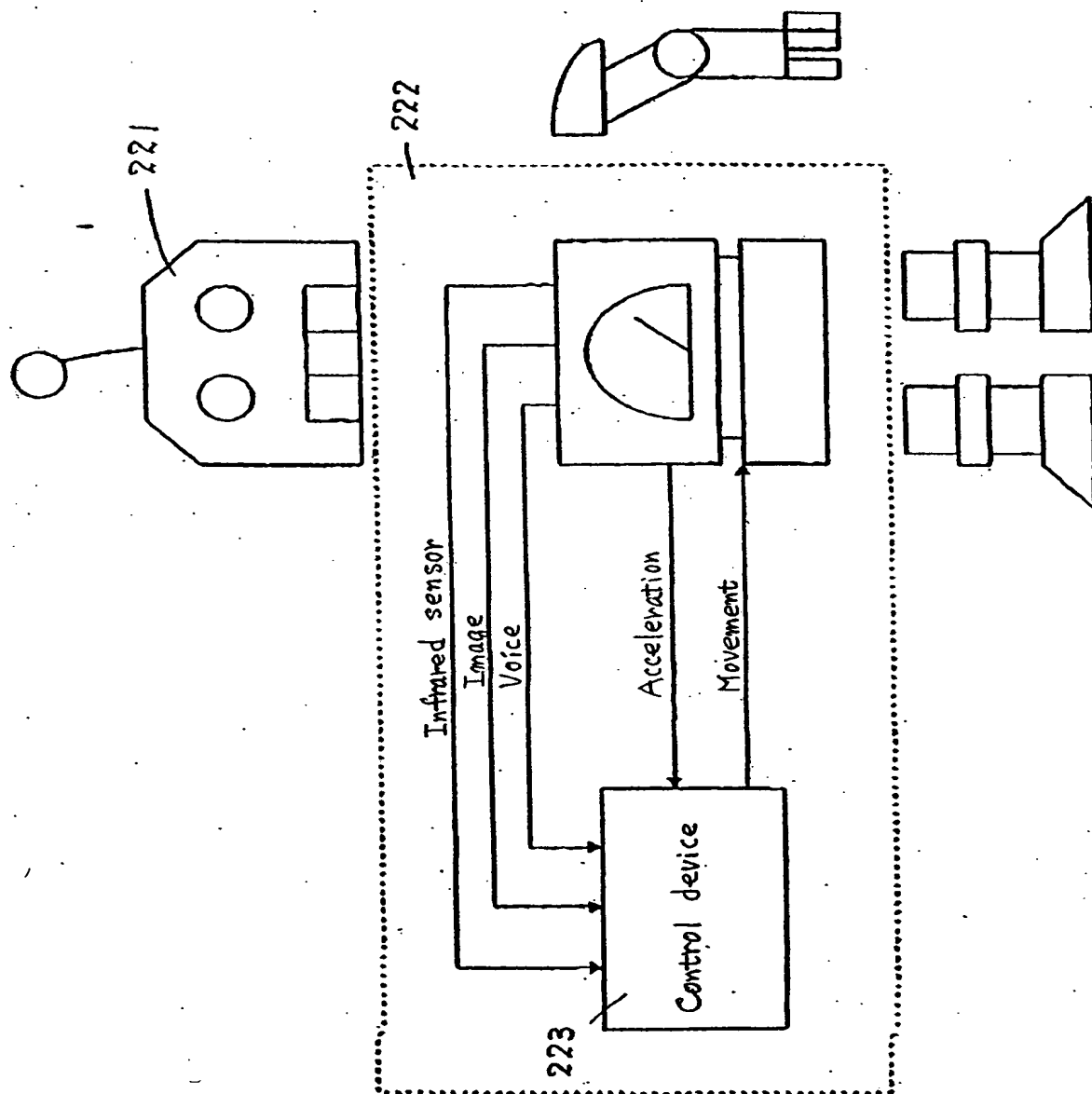


FIG. 22

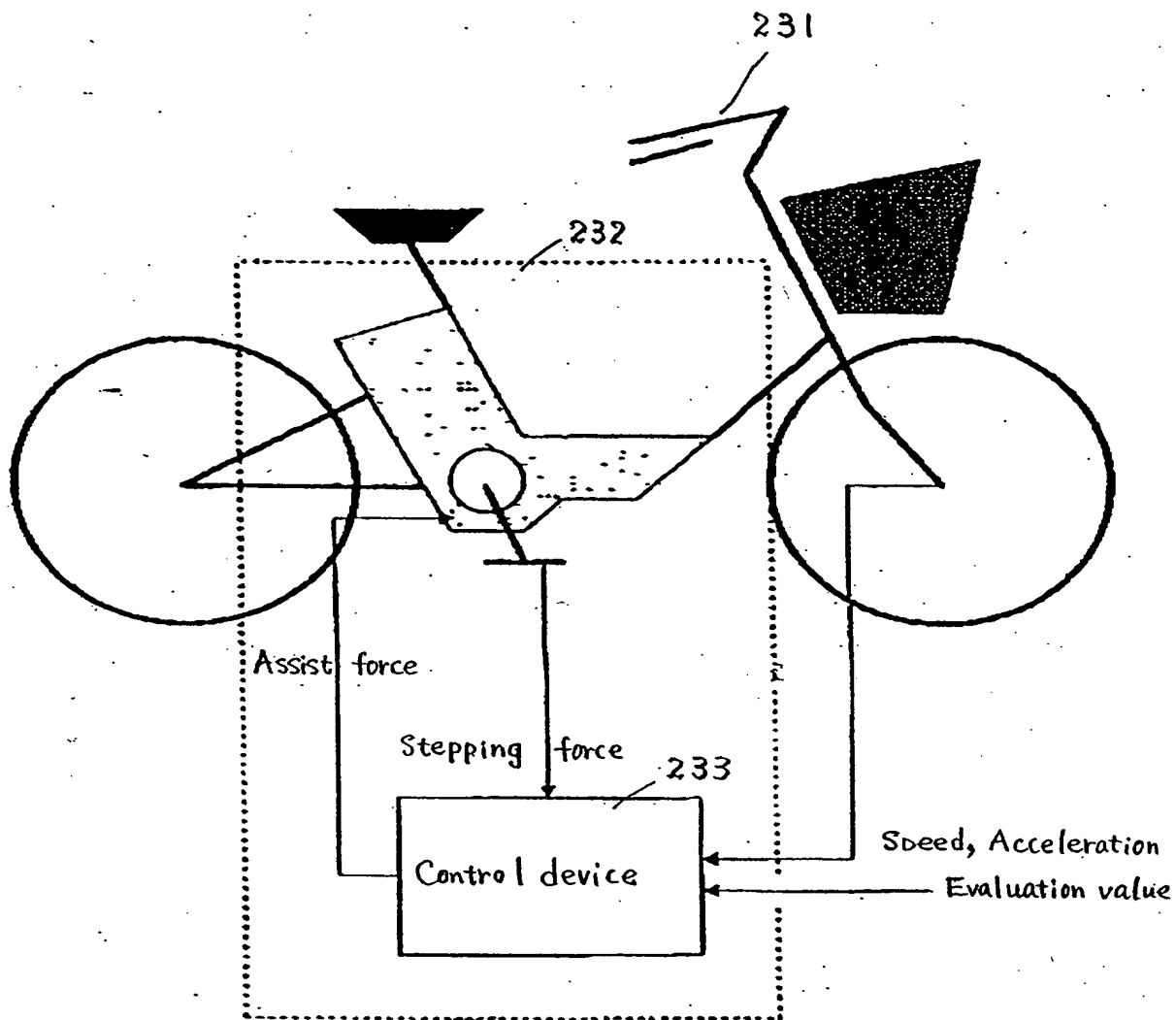
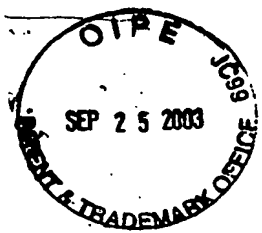


FIG. 23